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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/791,350

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Anand Ratibhai Patel

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7590

06/30/2006

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EXAMINER

PHAN, RAYMOND NGAN

ART UNIT

PAPER NUMBER

2111

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/791,350	Applicant(s) PATEL, ANAND RATIBHAI	
	Examiner Raymond Phan	Art Unit 2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Part III DETAILED ACTION

Notice to Applicant(s)

1. This action is responsive to the following communications: amendment filed on April 4, 2006.
2. This application has been examined. Claims 1-22 are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dobson et al. (US No. 6,766,386) in view of Bashford (US No. 6,629,179).

In regard to claims 1, 8, 10, 14, 18, 20, Dobson et al. disclose the system 310 comprising a first port 404 to allow the device to communicate with other devices on the expansion bus (see figure 4, col. 6, lines 3-14); a second port 402 to allow the device to communicate with devices on the second bus (see figure 4, col. 6, lines 3-15); a memory 414 to store data (see figure 4); receive a set of data from the expansion device on the expansion bus in the data path (see col. 7, lines 35-64); a logic to receive a response (i.e. interrupt signal) from the expansion device (i.e. target device) on the expansion bus (see col. 7, lines 50-55). But Dobson et al. do not specifically disclose generate an indicator of completion insert the indicator into a transaction queue after the set of data. However Bashford discloses receive the interrupt signal from the second bus (i.e. expansion bus) in a command path and preventing the interrupt signal from reaching the system processor (see col. (6, lines 23-56); generate an indicator of completion (see col. 6, lines 5-23); insert the

indicator into a transaction queue after the set of data (see col. 6, lines 5-23).

Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Bashford within the system of Bodson et al. because it would provide proper order and transmission of message signaled interrupts to the host computer.

In regard to claims 2, 15, Dobson et al. disclose the system 310 further comprising a PCI bridge (see col. 5, lines 39-53).

In regard to claims 3, 16, Dobson et al. disclose second bus is a system bus (see col. 5, lines 39-53).

In regard to claims 4, 17, Dobson et al. disclose the second is an expansion bus (see col. 5, lines 54-67).

In regard to claims 5, 9, 19, Dobson et al. disclose an indicator of completion comprising the step of generate a transaction addressed to a predetermined area of system memory (see col. 8, lines 11-24).

In regard to claims 6, 11, 22, Dobson et al. disclose the issuance of read request to target device (see col. 7, lines 50-55).

In regard to claims 7, 12, 22, Dobson et al. disclose the step of transmitting data from the read request to a predetermined address in the system memory (see col. 8, lines 11-39).

In regard to claim 13, Dobson et al. disclose the step of receiving the data from the target device (see col. 8, lines 12-39); receiving the indicator at the predetermined area of memory (see col. 8, lines 12-39); generating interrupt to the initiator (i.e. system processor) in response the indicator (see col. 9, lines 21-29); processing the data from the device 310 (see col. 5, lines 15-35).

Response to Amendment

5. Applicant's amendment and arguments, see pages 3-8, filed on April 4, 2006, with respect to the rejection of claims 1-22 under USC35102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bashford.

Conclusion

6. All claims are rejected.

7. The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure.

Solomon (US No. 6,941,408) discloses a message signaled interrupt generating device and method.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Raymond Phan, whose telephone number is (571) 272-3630. The examiner can normally be reached on Monday-Friday from 6:30AM- 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Primary, Paul Myers can be reached on (571) 272-3639 or via e-mail addressed to paul.myers@uspto.gov. The fax phone number for this Group is (571) 273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [raymond.phan@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see [hop://pair-direct.uspto.gov](http://pair-direct.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 central telephone number is (571) 272-2100.

Raymond Phan
June 23, 2005



MARK H. RINEHART
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100